

CLAIMS

- 1) A method of transporting a viscous petroleum effluent in pipes, characterized in
that the following stages are carried out :
 - separating the effluent into at least a solid phase consisting of particles coming from
5 the colloidal elements that act on the viscosity of said effluent and into a fluidized liquid
phase,
 - keeping an amount of particles dispersed in said fluidized liquid phase so as to obtain
a suspension,
 - circulating said suspension in the pipe.
- 10 2) A method as claimed in claim 1, wherein separation is carried out by addition of
an amount of n-alkane such as butane, pentane, heptane.
- 3) A method as claimed in any one of claims 1 or 2, wherein the particles are
removed from the fluidized liquid phase.
- 15 4) A method as claimed in any one of the previous claims, wherein said elements
are asphaltenes.
- 5) A method as claimed in any one of the previous claims, wherein said particles are
dispersed through mechanical mixing.
- 6) A method as claimed in any one of the previous claims, wherein the temperature
of said circulating suspension is controlled so as to slow down dissolution of the
20 particles in the effluent.

7) A method as claimed in claim 6, wherein the temperature of the suspension is kept below 40°C.

8) A method as claimed in any one of claims 1 to 5, wherein said particles are encapsulated after separation.

5 9) A method as claimed in any one of claims 1 to 5, wherein said particles are chemically modified prior to being dispersed in the fluidized effluent.

10 10) A method as claimed in any one of the previous claims, wherein an additive is added to disperse said particles.

11) A method as claimed in any one of the previous claims, wherein a predetermined amount of a diluent for said liquid phase is added.

12) A method as claimed in claim 11, wherein a badly-solubilizing diluent of said particles is selected.

13) A method as claimed in any one of claims 2 to 12, wherein the precipitated asphaltenes are added in proportions ranging between 1 and 30 % by mass.